

**Abstract**

The invention relates to a hardware implemented filtering method comprising the steps of

- 5 - establishing a representation DIS of the derivative of at least a part of a time-quantized input signal IS, and
- establishing at least one sample of a time- and amplitude-quantized output signal OS by performing filtering on the basis of at least a part of a filter representation IFC1, IFC2, IFC3 and said representation DIS of the derivative of at least a part of
- 10 said input signal IS.

The invention further relates to a hardware implemented decimation method for decimating a time-quantized input signal IS comprising the steps of

- dividing said time-quantized input signal IS into intervals,
- 15 - for each of said intervals establishing a sample of a time- and amplitude-quantized output signal OS according to the above mentioned filtering method.

The invention further relates to a fast filtering means FFM implementing the above-mentioned methods.